

## REMARKS/ARGUMENTS

I. Claim 16 was rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 6,151,248 (Harari et al.). For the reasons set forth below, applicants respectfully submit that claim 16 as amended overcome this rejection.

Claim 16 as now amended recite in part that each memory cell is formed in part with a first terminal in a trench, and a floating gate along the sidewall of the trench, and a coupling gate capacitively coupled to the floating gate and electrically connected to the first terminal, which is also in the trench. The second terminal of the cell is not in the trench.

Harari et al. does not disclose the coupling gate in the trench AND connected to the first terminal (see Figures 6 and 7 of Harari et al.). Furthermore, There is no second terminal which is not in the trench. Therefore, for all of these reasons, the rejection of claim 16, as amended, based upon Harari et. al is in error.

II. Claim 16 was also rejected under 35 U.S.C. 102(b) as being anticipated by U.S. patent 6,316,315 (Hofmann et al.) For the reasons set forth below, applicants respectfully submit that claim 16 as amended overcome this rejection.

As discussed hereinabove, claim 16 recites in part that each memory cell is formed in part with a first terminal in a trench, and a floating gate along the sidewall of the trench, and a coupling gate capacitively coupled to the floating gate and electrically connected to the first terminal, which is also in the trench. The second terminal of the cell is not in the trench. Thus there are three gates: a floating gate; a control gate and a coupling gate.

In Hofmann et al., the control gate appears to be in the trench, but it is not connected to the first terminal in the trench. Furthermore, the floating gate is not in the trench. Finally, there is no coupling gate. Therefore, for at least all of these reasons, the rejection of claim 16 as amended based upon Hofmann et al. is in error.

III. Claims 1, 4 and 16-19 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,541,815 (Mandelman et al.). For the reasons set forth below, applicants respectfully submit that the claims as amended overcome this rejection.

In claim 1 as amended, claim 1 now recites that the floating gate is in the trench and is along the entirety of the sidewall of the trench, which is the entire channel region.

As can be seen from a review of Mandelman et al., the floating gate of Mandelman is not along the entire sidewall. See Figure 1, wherein the floating gate is along only a portion of the sidewall in the trench, and therefore, along only a portion of the channel region. In addition, Mandelman et al. does not disclose the floating gate having a tip. Although the examiner asserts that Mandelman discloses having a tip away from the bottom, the examiner does not cite to any portion of the disclosure of Mandelman as disclosing this feature. Thus, for at least these reasons, claim 1 as amended overcome the rejection of Mandelman et al.

With respect to the rejection of claim 4, it should be noted that claim 4 is dependent upon claim 1. Therefore, for the same reasons that claim 1 is not anticipated by Mandelman et al., claim 4 is also not anticipated by Mandelman et al. for at least the same reasons.

With respect to the rejection of claims 16-19, applicants respectfully submit that amended claims 16-19 are patentable over Mandelman et al. for the reasons set forth below.

In amended claim 16, the claim now recites that there are three gates: a floating gate, a control gate and a coupling gate which is electrically connected to the first terminal at the bottom of the trench. It is respectfully submitted that Mandelman et al. discloses at most two gates: a control gate and a floating gate.

Therefore, for all of these reasons, applicants respectfully submit that claim 16 as amended overcome the rejection based upon Mandelman et al. Similarly, with respect to claims 17-19 which depend upon amended claim 16, claims 17-19 are also patentable over Mandelman et al for at least the same reasons.

IV. The allowance of claims 5, 8-11, 14-15 is noted with appreciation. However, it is respectfully submitted that all of the claims are in an allowable form, and action to that end is respectfully requested.

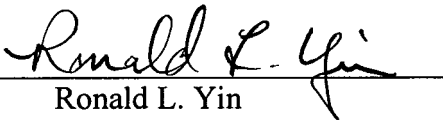
If the Examiner feels that a telephone conference would speed the prosecution of this application, the Examiner is invited to call Applicants' attorney at the telephone number listed below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to **Deposit Account Number 07-1896**, and reference Attorney Docket No. **2102397-992740**.

Respectfully submitted,

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